

OBSERVATIONS ON THE ECOLOGY OF A NEW
POPULATION OF THE MEDITERRANEAN
GECKO, *HEMIDACTYLUS TURCICUS*,
IN FLORIDA

WAYNE KING
University of Florida

The Mediterranean gecko, *Hemidactylus turcicus turcicus* Linnaeus, was reported from Florida at Key West by Stejneger in 1922 (Copeia, 1922(108): 56). Later Barbour (Copeia, 1936(2): 113) reported it from the vicinity of Miami. Specimens of this lizard were first collected in Gainesville, Florida, on 25 October 1956. The geckos were found in a wood frame building, which was being dismantled, on the University of Florida campus. On 15 March 1957, J. M. Pyka and I collected 34 of these lizards from the outside walls of other frame buildings in the vicinity. Twelve specimens were collected on 25 April 1957, and three on 9 May 1957.

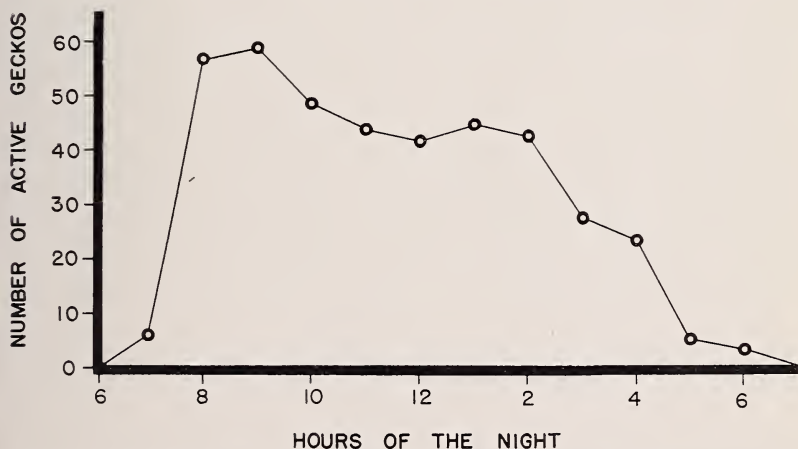


Figure 1. Approximate nocturnal activity of the Mediterranean gecko, *Hemidactylus turcicus*, recorded in Gainesville, Florida, during July 1957.

W. J. Rierner collected a series of 44 specimens from the same buildings on 9 August 1958. Students from southern Florida or from one of the Caribbean countries may have introduced the lizards, or they may have been released by some herpetologist

formerly in the university. All of the specimens have been placed in the University of Florida Collections.

The largest male and the largest female had snout-vent lengths of 59 mm. The smallest juvenile had a snout-vent length of 25 mm.

Observations were made during the month of July, 1957, in order to determine the activity cycle of the lizards. Tours of the buildings were made at hourly intervals. The number of lizards seen on each tour was counted, and the period of greatest activity was determined to be one to three hours after sunset. The number of active individuals slowly decreased after this period until all had disappeared shortly before sunrise. This is shown in figure 1. During the daylight hours they remained hidden in cracks around window frames and beneath the flashing of the asbestos siding.

On the night of 12 July 1957 a mating pair was observed on the wall of one of the buildings. When mating began the two were facing each other. The male moved toward the female and grasped her skin at midback with his jaws. In this position the body of the male partially covered the head of the female. By sidestepping, the male to the right and the female to the left, the two brought their bodies into contact. The male then placed his right hindleg over the tail of the female, but twisted his tail under hers. This brought the cloacae into contact. The total time lapse from the moment the male approached the female to the point at which copulation began was approximately two minutes. Copulation lasted about one minute, then the male left the female and darted up the wall. The female licked her cloaca several times and then she also darted up the wall.

Gravid females with mature eggs in their oviducts were both collected and observed on the buildings throughout the spring and summer months (April through August). This may indicate a five month breeding season similar in length to the breeding season of *Anolis carolinensis* reported by Hamlet (Copeia, 1952(3): 183). Captive females laid eggs on 4 May and 22 May 1957. The eggs measured 12 mm. in length and 9 mm. in diameter.